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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,153	04/22/2004	Takuro Sekiya	2271/67583-A	8131
23432	7590	06/14/2005	EXAMINER	
COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			HUFFMAN, JULIAN D	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/830,153

Applicant(s)

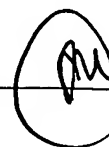
SEKIYA, TAKURO

Examiner

Julian D. Huffman

Art Unit

2853



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-17 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/175,181.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 7 April 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,764,174 has been reviewed and is accepted. The terminal disclaimer has been recorded. The prior non-statutory double patenting rejection is withdrawn.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 12-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Roy et al. (U.S. 6,428,160 B2).

Roy et al. discloses an ink-jet recording device comprising:

a head unit (fig. 4, element 60) having a plurality of multi-nozzle recording heads (64, 66, 68, 70), each having nozzles (column 1, lines 52-54), through which ink is fired on to a recording medium, and having a long dimension so as to cover the printing range of the recording medium (column 6, lines 57-61);

a recording medium heating unit (74) for heating a printed surface of a recording medium without contacting the printed surface of the recording medium, and said heating unit extending along a direction along which the nozzles of said recording head are arranged, and said heating unit having a heating range, the width of which is wider

than the width of a printing range of the recording medium (fig. 4, 74 and 72 are wider than the printheads and also the media on both sides).

Roy et al. also discloses a rear heating unit (72) provided on the rear side of the recording medium (heating unit 72 is located to the rear side of the recording medium, which is the leftmost side shown in fig. 4, or the side with the printed image could be considered the rear side), having a heating range extending along the direction along which the nozzles of said recording means are arranged, the width of which is wider than the width of printing range of the recording medium (fig. 4).

With regards to the limitation that ink is fired on to a fine-powder coated recording medium, this limitation does not further limit the ink-jet recording apparatus. The difference between the prior art of record and applicant's claimed invention is in the use of the device, and the manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself. See MPEP 2115.

Claim Rejections - 35 USC § 103

4. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy et al. in view of Matsumoto et al. (U.S. 6,523,948).

Roy et al. disclose that various types of heating devices may be used (column 7, lines 4-5 and column 6, lines 26-30).

Roy et al. do not disclose a light source and optical system condensing light emitted by the light source.

Matsumoto et al. discloses an optical LED heater including an optical system condensing light emitted by the optical heater (fig. 18, element 146, column 14, lines 10-34).

It would have been obvious to one having ordinary skill in the art at the time of the invention to replace the heater of Roy et al. with the optical heater system of Matsumoto et al., as taught by Matsumoto et al. into Roy et al., for the purpose of efficiently drying the ink (column 14, line 20).

Response to Arguments

5. In response to applicant's argument that Roy does not disclose certain mentioned advantages, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Applicant's argument that the applied prior art does not disclose a fine-powder coated recording medium is noted. However, the limitation does not further limit the apparatus. See paragraph 2 above for further explanation.

Allowable Subject Matter

6. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for the indication of allowable subject matter in claims 18-20 is the inclusion of the limitations of an ink-jet recording device including a recording medium heating unit for heating a printed surface of recording medium without contacting the printed surface of the recording medium, said heating having a heating range, the width of which is wider than the width of a printing range of the recording medium, further comprising a rear heating unit provided on the rear side of the recording medium, having a heating range, the width of which is wider than the width of printing range of the recording medium, wherein the rear heating unit's surface contacts the recording medium. It is these limitations found in the claims, as they are claimed in the combination of, that have not been found, taught or suggested by the prior art of record.

Though contact heating units are known in the art, there is no motivation to modify only the rear heating unit of Roy et al. to be a contact heating unit, while maintaining the front heating unit to be a non-contact heating unit.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 9:30a.m.-6:00p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JH
6 June 2005


K. FEGGINS
PRIMARY EXAMINER